



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,892	08/11/2004	Chia-Fong Yang	ACMP0098USA	4891
27765	7590	11/17/2006	EXAMINER	
NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION			TRAN, THANG V	
P.O. BOX 506			ART UNIT	PAPER NUMBER
MERRIFIELD, VA 22116			2627	

DATE MAILED: 11/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/710,892

Applicant(s)

YANG, CHIA-FONG

Examiner

Thang V. Tran

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,5,7,8,12,14,15,19,21,22,26 and 28 is/are rejected.
- 7) ☒ Claim(s) 2-4,6,9-11,13,16-18,20,23-25 and 27 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 7, 14, 21 and 28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear how a method step recited in claim 7, 14, 21 or 28 and method steps previously recited in its parent claim are relatively operated. It appears that a method step recited in claim 7, 14, 21 or 28 does not have any structural relation or connection with those method steps previously recited in its parent claim. Also, it is unclear what a write strategy parameter as recited in these claim is.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 5, 7, 8, 12, 14, 15, 19, 21, 22, 26 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Seo et al (US 6,631,110).

Regarding claim 1, see Figs. 2-8 of Seo et al which disclose a method (see Figs. 6 and 8) for writing an optical disk using an optical disk drive (see Fig. 2) comprising: determining a final start delay time (rising edge shift of first pulse) of a laser pulse used by the optical disk drive to write a pit (mark) on the optical disk, the final start delay time of the laser pulse used to write the

pit being determined as a first value (see Fig. 6) when there is a 3-period land (leading space having short pulse that is  $3T$ ) previous to the pit (mark), the final start delay time of the laser pulse used to write the pit being determined as a second value (see the shift of the rising edge in Fig. 6), which is less than the first value, when there is a non-3-period land (middle pulse or long pulse) previous to the pit; and writing the pit according to the laser pulse of the optical disk drive (see Fig. 6 and 8).

Regarding claim 5, see middle pulse of the space in Figs. 4 and 6 as a non-3-period land is one of 4 to 11 periods lands.

Regarding claim 7, limitations in this claim are inherently included in the system of Seo et al since its write strategy parameter can be applied to a high density DVD-RAN and a second generation 4.7 GB DVD-RAM that have burning speeds different from each other.

Regarding claim 8, see Figs. 2-8 of Seo et al which disclose a method (see Figs. 6 and 8) for writing an optical disk using an optical disk drive (see Fig. 2) comprising: determining a final start delay time (rising edge shift of first pulse) of laser pulses used by the optical disk drive to write a plurality of pits (marks) on the optical disk, the final start delay time of a 3-period pit (mark having short pulse of  $3T$  shown in Fig. 6) being less than the final start delay time of a non-3-period pit (mark having middle pulse or long pulse shown in Fig. 6) when there are lands with the same period before the plurality of pits respectively; and writing the optical disk according to the settings of the laser pulse used by the optical disk drive (see Fig. 6 and 8).

Regarding claim 12, see middle pulse shown in Figs 4 and 6 having 4-11 period as a non-3-period land that is 4 to 11 periods.

Regarding claim 14, limitations in this claim are inherently included in the system of Seo et al since its write strategy parameter can be applied to a high density DVD-RAN and a second generation 4.7 GB DVD-RAM that have burning speeds different from each other.

Regarding claim 15, see Figs. 2-8 of Seo et al which disclose a method (see Figs. 7 and 8) for writing an optical disk using an optical disk drive (see Fig. 2) comprising: determining a final end delay time (falling edge shift of last pulse) of a laser pulse used by the optical disk drive (see Fig. 2) to write a pit on the optical disk, the final end delay time of the laser pulse of the pit being determined as a first value when there is a 3-period land (space mark having short pulse shown in Fig. 7) following the pit (present mark), the final end delay time of the laser pulse of the pit being determined as a second value larger than the first value when there is a non-3-period land (space mark having middle pulse or long pulse shown in Fig. 7) following the pit (present mark); and writing the pit according to the laser pulse of the pit used by the optical disk drive (see Fig. 7 and 8).

Regarding claim 19, see space mark having middle pulse or long pulse shown in Fig. 7 as the non-3-period land that is one of 4 to 11 periods lands.

Regarding claim 21, limitations in this claim are inherently included in the system of Seo et al since its write strategy parameter can be applied to a high density DVD-RAN and a second generation 4.7 GB DVD-RAM that have burning speeds different from each other.

Regarding claim 22, see Figs. 2-8 of Seo et al which disclose a method (see Figs. 7 and 8) for writing an optical disk by using an optical disk drive (see Fig. 2) comprising: determining a final end delay time (falling edge shift of last pulse) of laser pulses by using the optical disk drive to write a plurality of pits on the optical disk, the final end delay time of a 3-period pit

Art Unit: 2627

(present mark having short pulse shown in Fig. 7) being greater than the final end delay time of a non-3-period pit( present mark having middle pulse or long pulse as shown in Fig. 7) when there are lands with the same period (space mark having same short pulse as shown in Fig. 7) after the plurality of pits respectively; and writing the optical disk according to the settings of the laser pulse used by the optical disk drive (see Fig. 7 and 8).

Regarding claim 26, see space mark having middle pulse or long pulse shown in Fig. 7 as the non-3-period land that is one of 4 to 11 periods lands.

Regarding claim 28, limitations in this claim are inherently included in the system of Seo et al since its write strategy parameter can be applied to a high density DVD-RAN and a second generation 4.7 GB DVD-RAM that have burning speeds different from each other.

#### ***Allowable Subject Matter***

5. Claims 2-4, 6, 9-11, 13, 16-18, 20, 23-25 and 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Claims 2-4, 6, 9-11, 13, 16-18, 20, 23-25 and 27 are allowable over the prior art of record because the prior art of record, considered alone or in combination, fails to suggest or fairly teach a writing method including a combination of all of limitation as recited in each of claims 2, 9, 16 and 23. Claims 3, 4, 6, 10, 11, 13, 17, 18, 20, 24, 25 and 27 are allowable with their respective parent claim.

#### ***Cited References***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited reference relates to a method for recording data on a recording medium by



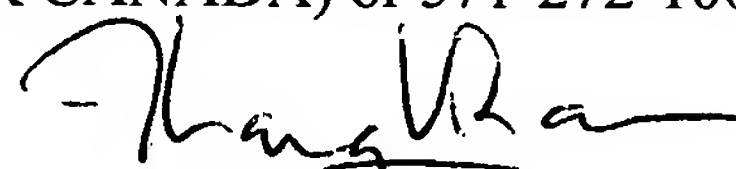
Art Unit: 2627

controlling delay time of a rising edge and/or trailing edge of a write pulse based on a period of preceding/following land or pit.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thang V. Tran whose telephone number is (571) 272-7595. The examiner can normally be reached on M-F 9:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nguyen Hoa can be reached on (571) 272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Thang V. Tran  
Primary Examiner  
Art Unit 2627